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10/709,704

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EXAMINER

MCCALL, ERIC SCOTT

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ALEX COLVIN, JAMES BUTLER,  
and THOMAS KORNISKI

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Appeal 2008-5390  
Application 10/709,704  
Technology Center 2800

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Decided: December 19, 2008

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Before EDWARD C. KIMLIN, PETER F. KRATZ, and  
CATHERINE Q. TIMM, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claim 1, 4, 7, 8, 12-22, 29, 31 and 35. Claims 2, 3, 5, 6, 9-11, 28, 33 and 34 stand objected to as being dependent upon a rejected base claim. Claims 1 and 12 are illustrative:

1. A method for real-time determination of exhaust gas flow through an exhaust pipe of a vehicle, the method comprising:

measuring a pressure difference upstream and downstream of a screen;

measuring exhaust gas temperature; and

determining the exhaust gas flow based on the pressure difference and the temperature.

12. The method of claim 1 wherein the screen covers substantially the entire area of the exhaust pipe.

The examiner relies upon the following reference in the rejection of the appealed claims:

Weigand	5,837,903	Nov. 17, 1998
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Appellants' claimed invention is directed to a method for determining the exhaust gas flow through an exhaust pipe of a vehicle. The method entails measuring the pressure difference upstream and downstream of a screen placed in a cylindrical tube that is attached to the exhaust pipe of the vehicle.

Appealed claims 1, 12-21, 23-27 and 32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Weigand. Claims 4, 7, 8, 22, 29-31 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Weigand.

We have thoroughly reviewed the respective positions advanced by Appellants and the Examiner. In so doing, we concur with the Examiner that the subject matter of claims 1, 13, 15-20, 23-27 and 32 is described by Weigand within the meaning of § 102. We also agree with the Examiner that the subject matter of claims 4, 7, 8, 22, 29-31 and 35 would have been

obvious to one of ordinary skill in the art within the meaning of § 103 over the Weigand disclosure. We will not, however, sustain the Examiner's § 102 rejection of claims 12, 14 and 21. Our reasoning follows.

There is no dispute that Weigand, like Appellants, discloses a method and system for determining the exhaust gas flow through an exhaust pipe of a vehicle by measuring the pressure differential upstream and downstream of capillary section 18. Appellants' argument notwithstanding, we fully concur with the Examiner that element 18 of Weigand qualifies as a screen, as broadly claimed. It is well settled that claim language must be given its broadest reasonable interpretation during *ex parte* prosecution, and the Examiner has presented a dictionary definition of the claim term "screen" i.e., "*something that serves to divide, conceal, or protect*" (see Ans. 12, second to last para.). Accordingly, since element 18 of Weigand clearly serves to divide flow meter 10 into upstream and downstream sections, as does the presently claimed screen, we agree with the Examiner that the claimed screen reads on element 18 of Weigand.

We will not sustain the Examiner's § 102 rejection of claim 12 which requires that "the screen covers substantially the entire area of the exhaust pipe". Element 18 of Weigand covers between 50-60% of the cross-sectional area of the flow meter, and it is the Examiner's position that "since 60% is greater than half, element 18 is interpreted as covering substantially the entire area of the exhaust pipe as claimed in claim 12." (Ans. 13, second para.). However, claim 12 requires more than that the screen substantially covers the exhaust pipe. The claim requires that "the screen covers substantially the **entire area** of the exhaust pipe" (emphasis added). In our

view, the 60% disclosed by Weigand is not a reasonable interpretation of the claim language when it is read in light of the present specification.

Claim 15, on the hand, recites “a flow restricting element extending substantially entirely across a cross-sectional area of the tube” (emphasis added). The claim language does **not** require that the restricting element extends entirely across **the** cross-sectional area of the tube, but only over “a” undefined cross-sectional area of the tube. Manifestly, element 18 of Weigand extends substantially entirely across a cross-sectional area of the flow meter, mainly a cross-sectional area corresponding 50-60% of the cross-sectional area of the flow meter. We note that independent claim 32 simply recites an interior screen having no particular cross-sectional area.

We will also not sustain the Examiner’s § 102 rejection of claims 14 and 21, which define the screen as including six strands per inch and ten strands per inch respectably. The Examiner’s citation of Weigand’s figure 2 is ineffective since the figure is not to scale. The Examiner’s statement that “Weigand **suggests** a screen which includes *about* six strands per inch” (Ans.5, emphasis added) may be more appropriate for a rejection under § 103, not the § 102 rejection applied by the Examiner which requires a description of the claimed element in the prior art. As pointed out by Appellants,

Weigand discloses that each parallel tube 20 of the capillary section of the LFE is square in cross section with an open internal area of 0.05 by 0.05 inches (Col. 3, ll. 38-39), significantly smaller than the open area (0.1317 inches) of the six mesh screen taught by Applicants to reduce or eliminate condensation formation while minimizing added back pressure

(App. Br. 6-7). The Examiner has not made out the case that the claim term “about” encompasses dimensions described by Weigand.

As a final point, we note that Appellants’ principal brief offers no substantive argument against the Examiner’s § 103 rejection of claims 4, 7, 8, 22, 29-31 and 35. In particular, Appellants state that they “believe the arguments presented above with respect to the rejection under 35 USC §102(b) apply equally to the claims rejected under 35 USC 103(a) such that the rejections under 35 USC § 103(a) stands or falls with the rejection under 35 USC § 102(b)” (App. Br. 7, third para.).

Accordingly, based on the foregoing, we will sustain the Examiner’s § 102 rejection of claims 1, 13, 15-20 23-27 and 32, as well as the Examiner’s § 103 rejection of claims 4, 7, 8, 22, 29-31 and 35. We will not sustain the Examiner’s § 102 rejection of claims 12, 14 and 21. Consequently, the Examiner’s decision rejecting the appealed claims is affirmed-in-part.

Appeal 2008-5390  
Application 10/709,704

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(i)(iv).

AFFIRMED-IN-PART

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